



Montrose & Del Amo Superfund Sites Site Update Fact Sheet

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • Spring 2018

In This Issue

Background	1
Site Map	2
Commercial Building Indoor Air Investigation	3–5
Cleanup Work at the Former Ecological Controls Industries (ECI) Property	5
Electrical Resistance Heating (ERH) Cleanup Technology: Pilot Study at the Montrose Site	5
Dual-Site Groundwater Treatment System	6
Developing a Community Involvement Plan	7



Background

The Montrose Chemical Corporation Superfund site (“Montrose site”) is the location of a former manufacturing plant that produced the pesticide chemical dichloro-diphenyl-trichloroethane (DDT) from 1947 to 1982. The site also includes nearby commercial and residential areas contaminated by the plant. DDT (and many other hazardous substances used at the plant) contaminated the site. In 1989, EPA added the Montrose site to the National Priorities List (NPL). *(See the box to the right for more information on the NPL.)*

The Del Amo Superfund site (“Del Amo site”) is the former location of a large-scale manufacturing plant that produced synthetic rubber during World War II. The plant was east of the former Montrose plant. The plant released hazardous substances—primarily benzene, toluene, ethylbenzene, and polycyclic aromatic hydrocarbons (PAHs)—into the environment. In 2002, EPA added the Del Amo site to the NPL.

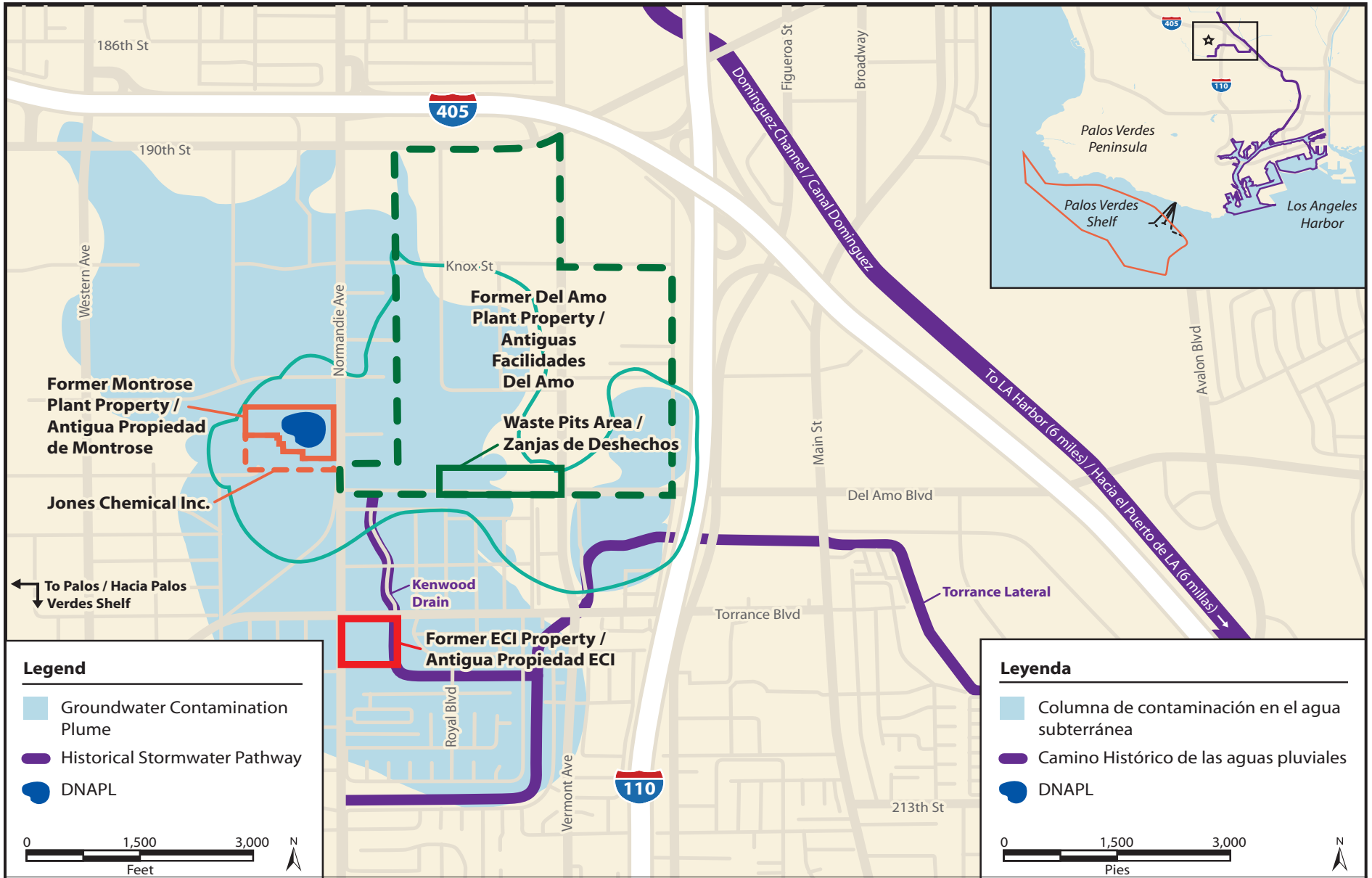
Operations on both properties contaminated the soil and groundwater beneath, and away from, these properties. The groundwater contamination from both sites has mixed, and EPA is cleaning up all the groundwater contamination as one project. EPA has been investigating the potential for vapor intrusion—the movement of chemicals from underground to the air above ground—in homes and businesses above the groundwater contamination. *(See pages 3–5 for more information.)*

What is a Superfund Site?

In 1980, Congress passed the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly called the “Superfund law.” This law was passed in response to growing public concern about health and environmental threats from hazardous waste sites. The law requires EPA to deal with abandoned, accidentally-spilled, or illegally-dumped hazardous substances. (Other types of pollution are handled by other environmental laws.) An important step in cleaning up a large, complicated site under the law is to add the site to the Superfund National Priorities list (NPL). Another key, early step is to conduct an extensive assessment of the site contamination, called the Remedial Investigation. If the RI determines there is a chance of risk to human health or the environment, additional work may be done to clean up the site. Depending on the size and complexity of a site, cleanup can happen quickly, or it can take many years.

Site Map: Montrose and Del Amo Superfund Sites

Harbor Gateway, Los Angeles County, CA / Harbor Gateway, condado de Los Angeles, CA



Commercial Building Air Investigation

Work at the Del Amo Superfund Site

In Fall 2017, Shell Oil Company (Shell), under EPA oversight, performed air sampling at two commercial buildings—Coca-Cola and LSC Communications—in the area formerly occupied by the Del Amo facility. (See Figure 2, page 4 for a map of these buildings.) The goal of sampling was to figure out whether pollutants from the Del Amo site were affecting the buildings' indoor air quality. "Vapor intrusion" is the scientific name for the process of contaminants, such as those from the Del Amo site, moving from under ground and into the air above ground. (See Figure 1 to the right for more information.)

Shell sampled the air beneath the Coca-Cola facility. It also sampled the air beneath and inside of the LSC building. EPA is evaluating the results of this sampling and expects to release the findings in Spring 2018.

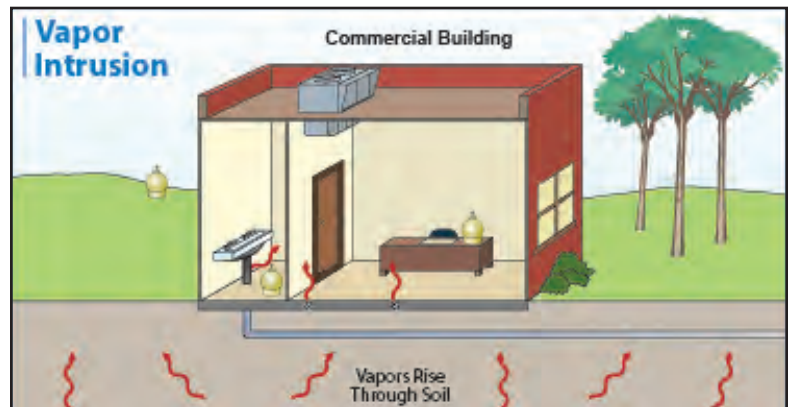


Figure 1: Vapor Intrusion - a process where underground contaminants volatilize (evaporate) and move into indoor air through cracks and other openings in the foundation of a building.

Additionally, as a follow-up to the Del Amo site Five-Year Review—a report done every five years to ensure EPA's cleanup plan is working properly—EPA is evaluating historic vapor intrusion data to decide whether there is a chance for vapor intrusion to occur at other nearby buildings.

How Do I Get More Information?

EPA Contact

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(Gerente de Proyecto)
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Information Repositories

An information repository is placed near a Superfund site and contains documents, reports, and letters about site cleanup activities.

Carson Public Library
151 East Carson Street
Carson, CA 90745
(310) 830-0901

Katy Geissert Civic Center Library
3301 Torrance Boulevard
Torrance, CA 90503
(310) 618-5959

Websites

Del Amo: <http://www.epa.gov/superfund/delamo>
Montrose: <http://www.epa.gov/superfund/montrose>

Commercial Building Air Investigation (Cont.)



Figure 2: The location of the two buildings sampled for indoor air contamination in Fall 2017. Results from the sampling are expected in Spring 2018. A summary of the sampling will be shared when complete. (See "Work at the Del Amo Superfund Site" section on page 3 for more information.)

Commercial Building Air Investigation (Cont.)

Work at the Montrose Superfund Site

EPA's vapor intrusion investigation, done in 2015 and 2016, found all residential areas near the Montrose and Del Amo sites are protected from site contaminants. However, EPA found higher levels of the chemical tetrachloroethene (known as "PCE") in the soil gas—or, air between soil particles—in a small industrial area west of Normandie Avenue and south of the former Montrose property and the JCI Jones Chemicals, Inc. (JCI) property. (See site map on page 2.)

EPA is making sure the companies responsible for the contamination will conduct all necessary actions to protect public health, such as: treating contaminated groundwater, continuing to monitor groundwater contamination, improving groundwater monitoring wells, treating PCE-contaminated soil, and ensuring PCE-contaminated soil gas does not move off the JCI property.

Other Cleanup Work

Cleanup Work at the Former Ecological Controls Industries (ECI) Property

EPA continues to work with a local developer on its plans to redevelop the property formerly owned by the company Ecological Controls Industries (ECI) for warehouse use. ECI, under EPA oversight, removed 7,000 tons of contaminated soil in 2016 from the property. ECI disposed of the soil at a certified hazardous waste landfill in Beatty, Nevada.

Electrical Resistance Heating (ERH) Cleanup Technology: Pilot Study at the Montrose Site

As part of EPA's plan to clean up concentrated chemicals—called "dense non-aqueous phase liquid" (DNAPL)—at the Montrose site (see map on page 2), EPA worked with the operator of the former plant, Montrose Chemical Corporation of California (Montrose). Under EPA oversight, Montrose designed a pilot study to test whether electrical resistance heating (ERH) cleanup technology is effective. ERH is EPA's preferred technology for DNAPL at the former plant after an intensive process that included gathering input from the community on treatment technologies.

How does the Electric Resistance Heating (ERH) system work?

The system runs electricity through long metallic rods, called "electrodes," underground throughout the site. The electrodes heat the soil and groundwater, vaporizing the contaminants. The system then collects this contamination vapor underground and transfers it to an above-ground treatment system.

Air-sampling instruments, along with a host of other equipment, check air quality during the pilot study. These instruments automatically record the levels of any contaminants to ensure none are escaping. EPA will use temperature probes to see how ERH affects the temperature underground, and a vacuum-like device will also be used to ensure all contaminants will be captured and treated.

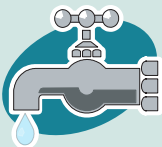
EPA has reviewed the ERH pilot study workplan submitted by Montrose. Installation of equipment for the pilot study started on May 7, 2018. EPA expects the pilot study to start around mid-August, 2018. Approved work plan and additional information will be shared via the website as soon as possible.

Dual-Site Groundwater Treatment System

In December 2017, under EPA oversight, Montrose began a test of the groundwater extraction and treatment system. During the test, the groundwater treatment system successfully reduced the levels of all chemicals, including chlorobenzene, trichloroethylene (TCE), and PCE, and reduced concentrations of the chemical para-chlorobenzene sulfonic acid (pCBSA), to below applicable standards. A test will continue until approximately the end of 2018.

The groundwater treatment system will clean up dozens of hazardous substances in the groundwater coming from both sites. In 2013, under EPA oversight, Montrose began constructing the groundwater treatment system, which includes a water treatment facility located on the former Montrose plant property. In 2015, Montrose tested the system, and from the results of the tests, had to redesign parts of it. In 2017, Montrose repaired and upgraded the system. EPA intends for Montrose to operate and maintain the groundwater treatment system, under EPA oversight, and make sure it runs efficiently and meets all cleanup goals.

A fully-operating groundwater treatment system will prevent highly-toxic, hazardous substances from spreading into cleaner areas of the groundwater. In the long term, the groundwater treatment system will protect the drinking water supply of Harbor Gateway, Torrance, Gardena, and unincorporated Los Angeles County.



Please note that no one is drinking or using groundwater contaminated by the sites. Drinking water provided to residents and businesses in the area is safe to drink.



EPA and California Department of Toxic Substances Control team members tour the groundwater treatment system.



Groundwater treatment facility near Normandie Avenue on the Montrose property.

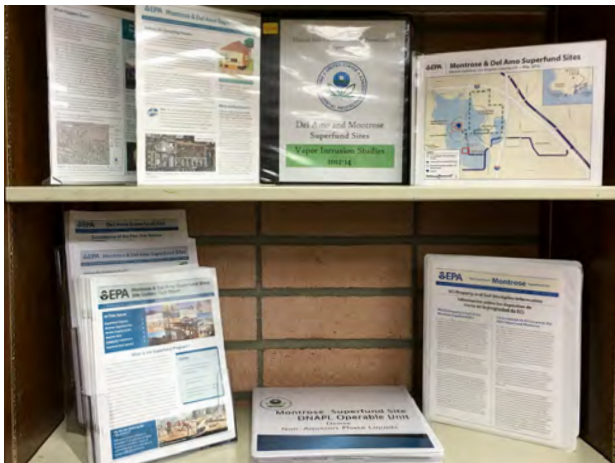
Developing a Community Involvement Plan



EPA representative speaks with community members at a public meeting.

EPA has begun to revise the sites' Community Involvement Plan (CIP). EPA will prepare one CIP since both sites affect the same community.

The CIP is a site-specific strategy to enable meaningful community involvement throughout the Superfund cleanup process. CIPs specify EPA-planned community involvement activities to address community needs, concerns, and expectations. A well-written CIP enables those affected by or interested in a Superfund site to understand the ways they can take part in the Superfund site cleanup process.



Informational material on sites at the Carson Public Library in Carson.

Information from community and stakeholder interviews is important to develop an effective CIP. Over the past three months, EPA has interviewed community members and other interested stakeholders.

Later this year, EPA will issue a draft CIP for public review.

Get Involved!

EPA commits to sending email updates on cleanup work every quarter to interested stakeholders. You can sign-up for the Del Amo & Montrose Superfund sites email distribution list by contacting EPA's Community Involvement Section Chief, David Yogi, at yogi.david@epa.gov.



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Sitios Superfund Montrose & Del Amo Superfund Sites

Please Join Us!
¡Únase a Nosotros!

Community “Open House” Event
Reunión Informativa “Puertas Abiertas”

Tuesday, June 19, 2018
martes 19 de junio 2018
5:00 p.m. – 7:00 p.m.

Katy Geissert Civic Center Library
3301 Torrance Boulevard
Torrance, CA 90503

Mobile Information Center
Centro de Información Móvil

Tuesday, June 19, 2018 Wednesday, June 20, 2018
martes 19 de junio 2018 *miércoles 20 de junio 2018*
11:00 a.m. – 2:00 p.m. 11:00 a.m. – 3:00 p.m.

Corner of / Esquina de
W. 204th Street and Budlong Avenue
Torrance, CA 90502

